

REMARKS:

Remarks on the amendments to the claim listing:

A major difficulty of this invention is that it is *princeps*: because the system of entangled samples can be prepared, for some nuclides, many months, or even years, before applying the method of using it. Hence, the invention may be really protected only if the Office allows for a number of protections taking into account the special technical features linking these protections along with the emitter + receiver paradigm which is usually considered a special case allowing for additional protections.

It shall be stressed that due to the territorial limitations of rights and to today's global economy, the invention apparatuses are likely to be designed or manufactured in different countries thus annihilating a restrictive granted protection. Similarly the invention's practice is likely to be carried over multiple jurisdictions, hence the need for some protection at the level of the quantum emitter device and of the quantum receiver device.

The absence of protections adapted to the distributed nature of the invention might prevent any further commercial developments of it because the investments required to develop commercial equipment involve a high financial risk. However such macroscopic quantum transmissions may provide breakthrough advancements in communications to humanity. Thus, the Office may exert its benefactor activities by promoting "the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries".

Hence, we propose to structure the new claims as follows:

- Claims aimed at the system of entangled samples
- Claims aimed at the method of manufacturing of the system of entangled samples
- Claims aimed at the method of use of the system of entangled samples
- Claims aimed at the device to manufacture the system of entangled samples
- Claims aimed at the system of quantum transmission comprising a device of quantum emission and a device of quantum reception
- Claims aimed at the device of quantum emission
- Claims aimed at the device of quantum reception

- Claims aimed the method of use to emit.
- Claims aimed the method of use to receive

The canceling of claims [1-46] does not denote any abandonment of matter in the application.

The table below provides the detailed support references and the type of the claims:

Claim listing	Derived from original claims	Support in the specification	Remarks
47	1	[0029], [0030].	System of entangled samples.
48	2	Table 1.	Dependant of claim 47.
49	5	[0051].	Dependant of claim 47.
50	5	[0051].	Dependant of claim 47.
51	10, 11	[0036], Fig 3, [0037], Fig 4, [0038], Fig5, [0049].	Dependant of claim 47.
52	1	[0029], [0030], Table 1 (93Nb41).	Dependant of claim 47.
53	1	[0029], [0030], Table 1 (113Cd48).	Dependant of claim 47.
54	1	[0029], [0030], Table 1 (115In49).	Dependant of claim 47.
55	1	[0029], [0030], Table 1 (117Sn50).	Dependant of claim 47.
56	1	[0029], [0030], Table 1 (119Sn50).	Dependant of claim 47.
57	1	[0029], [0030], Table 1 (125Te52).	Dependant of claim 47.
58	1	[0029], [0030], Table 1 (178Hf72).	Dependant of claim 47.
59	1	[0029], [0030], [0031], [0036], [0038], [0036], Fig 3, Fig 4, Fig 5.	Method of manufacturing of the system of entangled samples.
60	6	[0051].	Dependant of claim 59.
61	1	Table 1.	Dependant of claim 59.
62	1	[0029], [0030], [0031], Table 1 (93Nb41).	Dependant of claim 59.
63	1	[0029], [0030], [0031], Table 1 (113Cd48).	Dependant of claim 59.
64	1	[0029], [0030], [0031], Table 1 (115In49).	Dependant of claim 59.

Claim listing	Derived from original claims	Support in the specification	Remarks
65	1	[0029], [0030], [0031], Table 1 (117Sn50).	Dependant of claim 59.
66	1	[0029], [0030], [0031], Table 1 (119Sn50).	Dependant of claim 59.
67	1	[0029], [0030], [0031], Table 1 (125Te52).	Dependant of claim 59.
68	1	[0029], [0030], [0031], Table 1 (178Hf72).	Dependant of claim 59.
69	1	[0029], [0030], [0031], [0032], Fig 1, Fig 2.	Method of use of the system of entangled samples.
70	3	[0051]	Dependant of claim 69.
71	4		Dependant of claim 69.
72	7	[0053]	Dependant of claim 69.
73	8	[0053]	Dependant of claim 69.
74	13	[0057]	Dependant of claim 69.
75		[0058]	Dependant of claim 69.
76	1	Table 1	Dependant of claim 69.
77	1	[0029], [0030], [0031], [0036], [0038], [0036], Fig 3, Fig 4, Fig 5.	Dependant of claim 69.
78	1	Table 1	Dependant of claim 77.
79	1	[0029], [0030], [0032], Table 1 (93Nb41).	Dependant of claim 69.
80	1	[0029], [0030], [0032], Table 1 (113Cd48).	Dependant of claim 69.
81	1	[0029], [0030], [0032], Table 1 (115In49).	Dependant of claim 69.
82	1	[0029], [0030], [0032], Table 1 (117Sn50).	Dependant of claim 69.
83	1	[0029], [0030], [0032], Table 1 (119Sn50).	Dependant of claim 69.

Claim listing	Derived from original claims	Support in the specification	Remarks
84	1	[0029], [0030], [0032], Table 1 (125Te52).	Dependant of claim 69.
85	1	[0029], [0030], [0032], Table 1 (178Hf72).	Dependant of claim 69.
86	9	[0029], [0030], [0031], [0036], [0038], [0036], [0047], [0048], [0049], Fig 3, Fig 4, Fig 5.	Device of manufacturing (according to claim 59).
87	9	[0029], [0030], [0031], [0036], [0038], [0036], Fig 3, Fig 4, Fig 5.	System of quantum transmission (according to claim 69).
88	9	[0029], [0030], [0031], [0032], [0033], [0036], [0038], [0036], Fig 3, Fig 4, Fig 5.	Device of quantum emission (according to claim 69).
89	9	[0029], [0030], [0031], [0032], [0033], [0036], [0038], [0036], Fig 3, Fig 4, Fig 5.	Dependant of claim 88.
90	9	[0029], [0030], [0031], [0032], [0033], [0036], [0038], [0036], [0052], Fig 3, Fig 4, Fig 5.	Device of quantum reception (according to claim 69).
91	9	[0029], [0030], [0031], [0032], [0033], [0036], [0038], [0036], [0052], Fig 3, Fig 4, Fig 5.	Dependant of claim 90.
92	13	[0029], [0030], [0031], [0032], Fig 1, Fig 2.	Method of use of one entangled sample to emit (according to claim 69).
93	13	[0029], [0030], [0031], [0032], Fig 1, Fig 2.	Method of use of one entangled sample to determine reception (according to claim 69).